SOCIAL RESEARCH NUMBER:
67/2016
PUBLICATION DATE:
19/10/2016

Approaches to understanding outcomes and impact in Welsh public services: a case study of Local Service Boards and childhood obesity

Mae'r ddogfen yma hefyd ar gael yn Gymraeg.

This document is also available in Welsh.

OGL © Crown Copyright Digital ISBN 978-1-4734-7713-1

Approaches to understanding outcomes and impact in Welsh public services: a case study of Local Service Boards and childhood obesity

A research report for the Effective Services Group

Karis Vaughan and Jamie Smith

Full Research Report: Vaughan, K. and Smith, J. (2016). *Approaches to understanding outcomes and impact in Welsh public services: a case study of Public Services Boards and childhood obesity* GSR report number 67/2016

Available at: http://gov.wales/statistics-and-research/approaches-understanding-outcomes-impact-welsh-public-services/?lang=en

Views expressed in this report are those of the researchers and not necessarily those of the Welsh Government

For further information please contact:
Ceri Greenall
Knowledge and Analytical Services
Welsh Government
Cathays Park
Cardiff
CF10 3NQ
029 2082 5634
Email: ceri.greenall@wales.gsi.gov.uk

Table of Contents

1 Background **2**

2 Methods and Approach **3**

3 The Current Evidence Base **5**

4 Results **9**

Review of LSB Responses to the ESVG Report 9

Stakeholder Interviews 10

Local Service Board Interviews 10

How LSBs view the issue of obesity and the need to assess impact 10

Use of Evidence and Selecting Actions 11

How LSBs Judge Success 12

Barriers to Understanding Impact 13

Quantitative vs. Qualitative Evidence 15

5 Conclusions and Recommendations **15**

References **20**

Annex A - Topic Guides **22**

1. Background

1.1 This report presents the findings of research into how Local Service Boards[1] (herein LSBs) approach the assessment of outcomes, using their work around childhood obesity as a case study. It has been produced as part of ongoing work within the Preventing Childhood Obesity work stream of the Effective Services for Vulnerable Groups (ESVG) programme during the fourth Assembly[2]. The ESVG programme's purpose was to improve the effectiveness and efficiency of public services for vulnerable groups by identifying, promoting and supporting the development of successful collaborative approaches.

1.2 The issue of childhood obesity was identified by ESVG as a cross-public sector, collective challenge and incorporated into its work programme in 2013. More specifically, ESVG focused on exploring innovative, cross-public service solutions to the problem of childhood obesity. The ESVG Delivery Board commissioned a Preventing Childhood Obesity Steering Group to undertake this work, chaired by an ESVG Board member and with representatives from local government and the Welsh Local Government Association, Sport Wales, Public Health Wales, National Obesity Forum Wales, the Welsh Government, the police, and the third sector.

1.3 The steering group's final report, Turning the Curve on Childhood Obesity in Wales (Welsh Government, 2014) presented six key recommendations in the form of desired outcomes or 'changes we want to see'. These, it was asserted, would provide a consistent and comprehensive approach to tackling childhood obesity, if implemented in combination. This report, along with a discussion paper, was subsequently distributed to Local Service Boards (LSBs) for consideration. LSBs were asked to report on each of the six desired outcomes, in the context of their own actions and performance. They were in turn asked to consider the actions and interventions in place to prevent childhood obesity in their areas and inform ESVG of the outcome of their discussions.

1.4 A preliminary review of these written responses revealed that LSBs considered childhood obesity to be a priority and the majority were implementing approaches consistent with the recommendations of the ESVG steering group. However LSB responses gave less insight into how actions were being monitored and evaluated. It was unclear how LSBs went about understanding the outcomes or impacts of

[1] The research was carried out on Local Service Boards, the forerunners to the statutory Public Services Boards established in April 2016 under the Well-being of Future Generations (Wales) Act.
[2] The ESVG Programme has subsequently been re-named the Effective Services Group, or ESG.

their initiatives for preventing childhood obesity. Furthermore responses from a number of LSBs acknowledged gaps in their understanding of outcomes and expressed a desire for greater capacity in this area[3].

1.5 This report, therefore, makes an important contribution. It explores in detail the approaches taken by LSBs to understand the outcomes and/or impacts of their interventions into childhood obesity. This is important for two reasons:

1. For those working directly on childhood obesity, it gives an overall sense of how well developed such approaches are; where there is scope for development and improvement; and what is needed to make progress in measuring outcomes/impacts; and

2. For Public Services Boards and their stakeholders it gives important insight into how equipped PSBs are likely to be for moving towards the evidence-based Assessments of Local Well-being and Local Well-being Plans required by the Well-being of Future Generations (Wales) Act. The accompanying non-statutory guidance on the use of evidence and analysis in well-being assessments and plans recommends a more evaluative, critical approach to the use of evidence, which will require additional capacity and skills to fulfil (Welsh Government, 2016b).

1.6 The insight generated through this research can be used by the Welsh Government, and by PSBs, in various ways. For example, in terms of the evaluative aspects of the Assessment of Local Well-being and Local Well-being Plans it will allow the identification of areas where additional analytical support may be required, as well as identifying possible strengths and assets to build upon. The issue of childhood obesity lends itself particularly well to these requirements, because a) it tends to be approached in a collaborative way with public health professionals playing a prominent role; and b) compared to other topics, it is a well-researched issue lending itself well to evidence-based, reflective practice.

2. Methods and Approach

2.1 This research was undertaken between October and December 2015 as part of the Welsh Government's PhD Internship scheme. Whilst care was taken to design the research in a robust and replicable way, it is by no means systematic and comprehensive. It was intended to surface some of the main considerations around the assessment of outcomes/impacts through eliciting the views of practitioners in

[3] For clarity, this should not be not regarded as any indication of how well LSBs/PSBs are performing in relation to childhood obesity or how effective individual approaches have been.

the field and considering their views in the light of an established body of evidence on assessing childhood obesity interventions.

2.2 In the first instance a rapid review of evidence was conducted, which focused on prevalence and treatment of childhood obesity and overweight, and on methods and frameworks for evaluating public health interventions.

2.3 All LSBs' responses to the ESVG report were reviewed in depth, in order to gain an idea of the types of interventions and initiatives in place and how these align with the recommendations of the ESVG Steering Group and the wider literature on preventing childhood obesity. Responses were also reviewed to identify what, if any, evaluation methods are commonly used by LSBs.

2.4 Following this a number of LSBs were selected for further study. LSBs were not selected randomly but chosen to provide a varied sample on the basis of a number of criteria.[4] This included location and health board, in order to get spread of areas from around Wales.

2.5 In addition, the Child Measurement Programme for Wales has highlighted an association between levels of obesity and deprivation, LSBs were also selected based on level of deprivation according to Welsh Index of Multiple Deprivation (WIMD – Welsh Government 2015). In the first instance the LSB support officers were contacted and asked to advise on which LSB members would have the most relevant knowledge and experience of the local obesity strategy. In effect this meant that LSBs self-selected members for participation. This may present a source of bias in the sample compared to if members in the same pre-defined roles were selected in each area. However, given the range of positions that LSB members represent and the differing priorities and approaches selected across LSBs, often an individual in one LSB does not have an equivalent in another. Interviewees represented a range of roles and organisations including members from within public health, leisure and sports, anti-poverty initiatives, dietetics and support officers themselves. In total 12 members from 6 LSBs took part in semi-structured interviews exploring the following key themes:

- How the issue of obesity is viewed
- Why the current initiatives aimed at tackling childhood obesity were selected and how they were developed

[4] These criteria were: location (North, Mid and South Wales), health board, level of deprivation, and extent and nature of actions in place according to LSB responses to the ESVG report

- Which interventions are deemed effective and why
- The kinds of monitoring and evaluation efforts in place

2.6 Interviewees were selected from the following LSBs:

- Blaenau Gwent
- Ceredigion
- Conwy & Denbighshire
- Merthyr Tydfil
- Rhondda Cynon Taf
- Wrexham

2.7 In addition, interviews were conducted with a representative each from Public Health Wales and Welsh Government in order to gain an insight into what was expected of evaluation and impact assessment at the local level.

2.8 Topic guides used for interviews are provided in Annex A.

3. The Current Evidence Base

3.1 Obesity is a prominent global health concern. Body mass index (BMI) has been steadily increasing worldwide, with obesity nearly doubling since 1980 (Stevens et al., 2012). Obesity is associated with a number of adverse health outcomes including excess mortality (Prospective Studies Collaboration, 2009) and chronic conditions such as hypertension and diabetes (Mokdad et al., 2003). Childhood obesity is associated with a range psychological co-morbidities during childhood (Pulgaron, 2013) and contributes to obesity (Serdula et al., 1993), morbidity, and mortality (Reilly & Kelly, 2011) in adulthood. The most recent available analyses from the Child Measurement Programme for Wales 2014-15 (Public Health Wales 2016) shows that 26.2% of reception age children in Wales are overweight or obese, a statistically significantly higher level than in England.

3.2 A range of intervention efforts in a variety of settings have been employed in an effort to tackle childhood obesity. In the UK these have included targeted reduction of soft drink consumption in schools (James et al., 2004), parenting and family based approaches (Robertson et al., 2012), and active play interventions (O'Dwyer et al., 2012), amongst others.

3.3 A recent systematic review by the Cochrane Collaboration of interventions aimed at preventing childhood obesity (Waters et al., 2011) concluded that such interventions may be effective at reducing adiposity in children. Small but clinically significant effects corresponding to a reduction of around 0.15 kg/m² are possible. Due to the varied and complex nature of the interventions included in this review it was not possible to isolate the most effective components of obesity prevention interventions. However the review did identify the following policies and strategies which are common to beneficial programmes:

- School curriculum that includes healthy eating, physical activity and body image
- Increased sessions for physical activity and the development of fundamental movement skills throughout the school week
- Improvements in nutritional quality of the food supply in schools
- Environments and cultural practices that support children eating healthier foods and being active throughout each day
- Support for teachers and other staff to implement health promotion strategies and activities (e.g. professional development, capacity building activities)
- Parent support and home activities that encourage children to be more active, eat more nutritious foods and spend less time in screen based activities

3.4 The majority of these strategies arguably fall within PSBs' influence and so could provide effective strategies for public services working collaboratively at a local level to employ in tackling childhood obesity.

3.5 In tackling obesity the government Foresight Report (Foresight, 2007) highlights the need for a change in attitudes towards obesity policies, with obesity being redefined as a societal and economic issue rather than simply a health issue. The ethos behind the development of LSBs was to encourage partnerships between a variety of local stakeholders and to encourage collaborative working and so LSBs, and from April 2016 PSBs, should be ideally placed to take a holistic approach towards reducing childhood obesity rates.

3.6 Foresight also highlights the need for ongoing evaluation of obesity strategies to enable continuous improvement. Ongoing obesity strategies should be supported

by ‘expert analysis, data-gathering processes and a robust evaluation framework’ (Foresight, 2007, pg. 15). However, prior to undertaking this research, the extent to which LSBs were effectively evaluating their efforts was unclear.

3.7 Evaluation has often been highlighted as a concern in the field of public health and there are a number of difficulties in evaluating complex public health interventions. Difficulties include wide ranging impacts of interventions beyond the health sphere, and multiple interacting variables which make it difficult to isolate causal links (House of Commons Health Committee, 2009). This serves to reinforce the important contribution this study can make, by voicing the practitioners’ view of how the evaluation of outcomes is viewed and approached in Wales, in a highly evidence-based area of public services.

3.8 In some parts of the evaluation literature, randomised controlled trials (RCTs) were long-considered the ‘gold standard’ in evaluation practice. Where complicated social issues are concerned, this will not always be the case; indeed RCTs will often be impractical for various technical reasons, disproportionately expensive or time-consuming for the matter at hand. Alternative approaches, such as theory based approaches are often viable, sometimes more proportionate alternatives when controlled trials are not possible or desirable (Blamey & Mackenzie, 2007).

3.9 Theory based approaches include Realistic evaluation and Theory-of-Change evaluation, neither of which require the use of experimental control. Realistic approaches track the outcomes which emerge from specific combinations of proposed mechanisms of change and contexts, in an attempt to observe which of these produces the desired outcomes. They aim to answer the questions of what works, for whom and under what circumstances. Theory-of-Change approaches provide a way to assess the extent to which an intervention has had an impact, as well as opening the ‘black box’ of an intervention to understand the reasons why it has or hasn’t been effective. They map the inputs, actions, outputs, outcomes and impacts that are expected to occur as a result of an intervention. In doing this, Theory-of-Change approaches allow the examination of the causal links between a chain of results and whether the implementation reflected the expected theory.

3.10 Given the complex nature of evaluating public health interventions a number of tools have been developed in order to aid evaluation efforts. The evidence suggests that data gathered using a consistent guide or framework can be used not just to assess an intervention’s overall public health impact, but also to compare multiple

interventions with one another and inform decisions about distributing resources to the most effective programmes.

3.11 One such tool is the RE-AIM framework (Glasgow, Vogt, & Boles, 1999), which has been widely applied to evaluation of obesity interventions and has been adapted for use in assessing the public health impact of broader health promotion policies as well as individual interventions (Jilcott et al., 2007). RE-AIM is discussed here in the context of LSB actions, but purely to give an example of the type of approach that PSBs may consider taking to evaluation. RE-AIM it is not advocated to the exclusion of other frameworks and approaches available. In relation to obesity in particular, it would be equally valid to consider the Standard Evaluation Framework from the National Obesity Observatory (Roberts, Cavill, & Rutter, 2009). There are undoubtedly a number of other evaluation approaches which might lend themselves to the types of issues PSBs are engaged with.

3.12 Within the RE-AIM framework the impact of a public health intervention can be conceptualised as a function of five interacting factors: reach, efficacy, adoption, implementation, and maintenance. This approach asserts that evidence of impact should be broadened to include more than simply efficacy in order to account for the complex nature of public health interventions operating in the real world. Whilst efficacy is key in determining impact, most population based evaluations only focus on improvement in some targeted health indicator, such as BMI data gathered via the Child Measurement Programme. In the current context, with many different interventions being delivered simultaneously by public services at a local level, any child taking part in the Measurement Programme is likely to have been exposed to multiple interventions. Efficacy indicators such as this give no indication of the individual performance of interventions and no way of distinguishing effective initiatives from underperforming ones. Furthermore, such an approach runs the risk of missing unintended negative effects. Therefore RE-AIM recommends that public health evaluation should include a range of efficacy measures which map onto the key hypothesised causal mechanisms and intended outcomes. These may include measures such as activity levels, change in knowledge, change in environment, stakeholder opinions, quality of life, use of services, referral rates, and measures of self-esteem.

3.13 Reach and adoption represent the number of individuals receiving the intervention and the number of settings providing it. Given that such data is often collected as part of Results Based Accountability (RBA) assessments it is likely that LSBs

already held information on reach and adoption. However, in order to truly understand impact, the representativeness of settings and risk characteristics of participants should be considered in order to ensure equity in service provision. Equity is a particular issue in this field as childhood and youth obesity is closely linked with socio-economic disadvantage (White et al., 2007) and it is important to ensure that interventions reach those who need them most. Although these participants can be difficult to engage, the recent Cochrane review noted that interventions aimed at preventing childhood obesity can often have a disproportionately positive effect on disadvantaged groups.

3.14 As highlighted in RE-AIM, information about the implementation of interventions should not be overlooked when assessing impact. The failure of an intervention may not truly reflect a lack of effect, but rather a failure of implementation. This includes aspects of both participant behaviour (e.g. adherence) and facilitator actions (e.g. the ability of staff to deliver the programme as intended, availability of resources). Process evaluation can provide insight into why a programme fails or has unintended consequences as well as assessing fidelity and quality of implementation, clarifying causal mechanisms, and identifying contextual factors associated with variation in outcomes. Driving questions when reporting implementation should relate to how the intervention works, for whom, under what conditions, and at what cost (Waters et al., 2011).

4. Results

Review of LSB Responses to the ESVG Report

4.1 LSBs' responses to the ESVG Steering Group's report show that they were already engaging in a wide range of actions that align with the recommended strategies set out in the Cochrane review, and were also consistent with the outcomes put forward in the ESVG report. In particular actions focused on increasing opportunity for children to engage in physical activity both in and out of the school environment and improving access to and provision of healthy foods in schools. In addition several LSBs were engaged in early years and maternal health obesity prevention projects, such as breastfeeding programmes and nutrition in pre-school settings, which were not covered by either the Cochrane or ESVG recommendations.

4.2 With regard to the RE-AIM framework, for illustration, LSBs appeared to already be engaging with the reach and adoption aspects of this framework with the majority of LSBs reporting figures for uptake of activities and/or the number of providers that

are involved in delivering interventions. However there was far less consideration of the additional factors identified in the framework. LSBs provided little information about the demographic characteristics of those taking part in obesity initiatives, for example, and lacked evidence of whether initiatives were really reaching their target populations. Neither did LSBs provide any information about the implementation or maintenance of programmes. These factors are important, not just for assessing impact, but to provide vital information for the sharing of practice between LSBs. Collecting information about the exact process of implementing initiatives and highlighting any local challenges can provide insights to inform the approach when applying the same technique elsewhere.

Stakeholder Interviews

4.3 Interviews with representatives from Welsh Government and Public Health Wales revealed that these stakeholders felt that LSBs were well placed to encourage a holistic approach to tackling childhood obesity and to improve evaluation in this field. They emphasised a need for greater collaboration in developing and delivering interventions both within and between LSBs. A primary concern was that evaluation should be embedded within programmes and that outcomes and indicators should be defined from the outset, especially if facilitators were expected to evaluate their own programmes. It was felt that the most beneficial approach in the field of childhood obesity would be to have a defined set of measures that all programmes would be expected to report on, allowing comparability across Wales. Such a set of measures would be beneficial to LSBs, not only for understanding outcomes and impacts, but also for monitoring progress across Wales at an organisational level. Stakeholders acknowledged that LSBs often faced considerable budgetary and time pressures and highlighted the need for realistic targets based on progression rather than absolutes.

Local Service Board Interviews

4.4 A number of key themes emerged which give an insight into how LSBs operated and where capacity may be built for understanding outcomes and impacts in the future.

How LSBs view the issue of obesity and the need to assess impact

4.5 LSBs generally viewed childhood obesity as a cross-cutting issue that sits within a wider network of societal and economic influences. Issues such as mental health

and wellbeing, housing, employment and education are all considered alongside obesity. LSBs were ideally placed to tackle such issues in a holistic manner, however in the majority of cases public health and health board partners take the lead on the obesity agenda. LSB members in public health roles were the most frequently recommended by support officers as interview candidates.

4.6 The majority of LSBs were well aware of gaps in their ability to understand outcomes and place value on building this capacity but are unsure of the best way to go about this. Although most LSBs utilised Results Based Accountability in their evaluative process, this method does not require causal explanations of how and why interventions work and will not, therefore, allow for meaningful evaluation in its own right. LSBs realised the importance of understanding their actions and impact in order to deliver better outcomes but were constrained by limited capacity.

'the main aim of the legislation with the SIPs and the well-being plans is to become more efficient and effective and delivering better outcomes, it's very difficult to do that if you haven't got the right things in place to be able to really dig deep.'

Use of evidence and selecting actions

4.7 Reference to the empirical evidence base when selecting and developing interventions is key in understanding causal processes and so allowing better evaluation and replication of interventions. The attitude towards and use of empirical evidence was varied. Some LSBs made extensive use of evidence from a range of sources when identifying priorities and selecting actions, including seeking out information from Welsh Government and councils across the UK and making use of published research, NICE guidance, and consultations with the community and local stakeholders. Other LSBs felt that although evidence based practice was important there should always be room for adaptation according to unique local needs, or preferred personal communication from trusted colleagues rather than prescribed guidance. Some also felt that there was an insufficient research base from which to draw firm conclusions about what methods were most effective for preventing childhood obesity. However, in the majority of cases LSBs were delivering at least some interventions that were originally developed in an evidence based way, even if the LSB was not making direct use of empirical evidence themselves.

4.8 Despite this often broad consideration of the evidence base in many cases, when it comes to selecting actions, decisions were largely based on what resources were

available and what partners were best able to deliver. Such an approach is likely to have a knock on effect on understanding outcome and/or impact, as evaluation processes and outcome indicators are not built in at the beginning of the programme, and was highlighted as a potential problem by stakeholders.

4.9 A striking observation was that some interviewees questioned the value of evaluating interventions that were already based on evidence. It was felt that as these interventions had been developed and delivered in line with robust evidence or recommended practice then they should produce an impact. To then evaluate that intervention as well was seen almost as an inference that the initial research was wrong or that the LSB was not delivering the intervention to a high enough standard. This suggests that there is scope to develop the role of process evaluation, which monitors how interventions are implemented and how this is likely to affect the outcomes they produce. Even where interventions are evidence-based and established as effective, there needs to be some degree of oversight over how they operate and this may determine how effective they are.

'If we know something is good practice why would you want to measure it as well? Why would you follow something through and measure when the evidence base is already saying if you do this you'll get that […] are we saying that the programme doesn't deliver what it should?'

How LSBs judge success

4.10 No LSB reported having a defined or consistent set of indicators for judging the success of interventions for childhood obesity, often individual members from within the same LSB each reported their own unique opinions on what made an intervention a success.

4.11 In some cases success appeared to be based more on sustainability and self-sufficiency of a scheme (the knowledge that it was working in a practical sense, rather than its end product). In other cases programmes were thought to be a success because they had been widely implemented in settings where, otherwise, there would be no action at all. Often the results of these interventions, particularly system-wide interventions such as the Healthy Schools Scheme or legislation such as the Active Travel Act, were perceived as intangible and could not be captured with single specific measures. Rather, there was a general change in wider environments and attitudes. Similarly it was felt that, whilst interventions delivered within the health sector could utilise existing health records and assessment

methods, interventions from the community sector had far more trouble defining suitable outcome indicators. Often interviewees spoke about having a 'belief' in their actions but being unable to conclusively demonstrate that they are most effective.

4.12 Although interviewees did believe that some robust evaluation was being carried out it was described as 'piecemeal' or 'in pockets' rather than being widespread. Whether or not a project was well evaluated was dependent on the nature and scale of the programme with large, externally funded programmes having better evaluation.

'Quite big joint programmes like European social funded programmes have to have evaluation built into them, then you have other more local projects that maybe for one reason or another fall off the radar and kind of get forgotten about.'

Barriers to understanding impact

4.13 A number of factors were discussed which restricted LSB's ability to effectively assess impact. Many of these related to limitations on available resources, funds and general capacity but difficulty engaging both potential evaluators and those being evaluated was also highlighted.

'It's the capacity. It's people not recognising the value. They're that busy getting on with the task and what they have got to do. Whether or not it makes a difference at the end of it, they are usually on the next thing by then aren't they?'

4.14 There was also a sense that evaluation can be overwhelming and 'unwieldy', as vast amounts of data are collected for fear of missing key information but there is then a difficulty in making this data meaningful. This approach was at odds with the need to have 'comprehensive yet concise' tools for decision making. Collecting unmanageable amounts of data was also a potential pitfall highlighted by stakeholders.

4.15 A widely cited restriction on conducting suitable evaluation was time constraints. In part this is due to the fact that public health interventions in general, and for obesity in particular, were perceived as taking a long time to establish an effect.

'I wouldn't expect to see yearly improvements; I would hope to see 5 or 10 yearly improvement'

4.16 In addition, the nature of funding cycles and the need to quickly feed back on progress placed time pressures on the evaluation process. In such cases evaluation

had to rely on less robust methods and qualitative data alone including 'belief' in projects.

'They hit the end of their funding cycle, the new funding's coming out in 3 months, you've only got 3 months to evaluate that project and know whether it's worth. You go on what they say, anecdotal evidence, 'we believe this project works' rather than doing a really comprehensive evaluation.'

4.17 Furthermore it was felt that there was sometimes an unrealistic expectation from above of what is achievable at a local level, as LSBs were usually running small scale interventions on a limited budget. Rather, national policies such as a sugar tax would be necessary to have a noticeable impact on population levels of childhood obesity.

4.18 Although LSBs reported having actions in place to reach disadvantaged groups, this usually involved targeting high risk areas or communities. There was less information about whether the most vulnerable or high risk individuals within these communities actually engaged with services.

4.19 All these factors limited LSBs ability to evaluate despite their desire to improve their understanding of impact. In some cases, however, interviewees also believed that there were downsides to evaluation. There was a perception that there is a degree of risk attached to robust evaluation as it might reveal a lack of impact (potentially because of the size of the intervention and the multifactorial nature of obesity) and have implications for resources and continuation. This issue can also be tied up with the fact that evaluation is often assigned to the facilitators of the intervention themselves, another problem highlighted by stakeholders. Evaluators in such an invested position are unlikely to be able to take a fully impartial perspective and have more to lose from admitting that an intervention hasn't worked than an independent investigator.

'You always see something really good in, because you know, programmes are very rarely all bad, complete rubbish. You know there is always something to be gleaned […] we're saying 'oh but this bit was really good', instead of 'yeah but the majority of it is absolutely nonsense'. We don't want to admit that we've wasted money, if you like'

'[there's no point in saying] I want you to do x and note the difference that you've made because it's not one thing that makes a difference for childhood obesity, it's multifactorial. So if we put in one project we wouldn't note any difference anyway.

And I think that would be my concern, because they wouldn't be able to see the value and then they might say 'what's the point in doing this because there's no difference made' and I think we've got to be very careful'

4.20 It was felt that constantly asking partners to report back on the impact that their actions had made when, in fact, they were likely to have had only a small effect on the wider issue of childhood obesity would be demoralising. In such a scenario partners may fail to see the value of their actions in contributing to the larger collaborative effort to reduce childhood obesity levels. This suggests there is a role for meta-evaluation and synthesising evidence on childhood obesity and similar issues, using individual contributions to assess the overall progress towards a shared outcome. It also suggests, in turn there could be a role for the Welsh Government in facilitating such meta-analysis on key issues.

Quantitative vs. qualitative evidence

4.21 The importance of qualitative data in providing a 'richer' representation of how interventions are operating was emphasised. However in some cases LSBs felt that at an organisational level there was a push for quantitative data, such as delivery figures, at the expense of qualitative data. Qualitative data was seen as key in telling the LSB about the perceptions of those actually receiving interventions in a way which quantitative data could not, and as a 'selling tool' for communicating the value of interventions to decision makers and executive bodies.

'It's making executive bodies more understanding of their communities. Making it more real.'

4.22 Quantitative data alone was seen as insufficient for telling the full story, although it was acknowledged that qualitative data must be backed up with 'hard data'.

'Case studies seem to hit home […] but backed up with data rather than just hope'

5. Conclusions and recommendations

5.1 Overall the findings of this research are encouraging. They suggest LSBs were willing to engage in open, meaningful discussion around evaluation and have a fairly high level of awareness of why evaluation is important and the challenges it presents. It also suggests that LSB were eager to grow their capacity and develop their approaches to assessing outcomes and impacts. On the other hand, the research also reveals (in relation to the issue of childhood obesity at least) that

LSBs had limited capacity and skills available to assess outcomes and impacts effectively.

5.2 If PSBs are to be equipped for the new responsibilities placed on them by the Well-being of Future Generations Act, then the effective use of evidence and analysis to critically evaluate and shape service delivery will certainly move up the agenda. This research reaches some pertinent conclusions in this respect, as well as for the field of childhood obesity more generally:

5.3 Firstly, there is clearly scope for additional guidance and support around assessing the effectiveness of interventions into childhood obesity. In particular, the desire for a shared set of outcome measures, or some kind of outcomes framework, came through strongly in the evidence. Given that LSBs reported wide variation in their approaches to judging their effectiveness, and often felt unable to demonstrate it meaningfully, there would be clear benefits in such a development, giving PSBs a common starting point and allowing for comparison between areas and interventions. A framework or outcomes set would also cut down on overall data collection and potentially eliminate unnecessary or marginal data.

5.4 The evidence also suggests that any guidance in this direction could usefully help to set expectations of what is achievable. The evaluation of the European Social Fund LSB development and priority delivery project (Welsh Government 2016a) made similar recommendations, highlighting the fact that outcomes for some projects were vague making them difficult to measure, whilst other projects discovered their outcomes were not realistic and therefore focussed their attentions on evaluating progress towards intermediate outcomes. Guidance would therefore be beneficial regarding what types and what magnitude of outcomes are to be expected in the immediate, intermediate and longer-term, which would help PSBs to assess their effectiveness in the short-term and understand how their efforts contribute to longer-term, population-level outcomes.

5.5 It is clear from the evidence gathered here that LSBs placed considerable value on qualitative evidence and saw it as a vital tool in unpacking the explanations behind the quantitative evidence on childhood obesity. The evidence also highlights that approaches to gathering and using qualitative evidence are comparatively under-developed and offer scope for improvement.

5.6 Evidence from the interviews with LSB officials also demonstrated that LSBs did not routinely consider evaluation during the early stages of intervention development, or

in selecting their approaches. It is widely acknowledged that plans for evaluation should be considered alongside policy and intervention design, in order to maximise the 'evaluability' of the initiative and ensure the pertinent questions can be addressed (House of Commons Health Committee, 2009). Indeed, the use of evaluability assessments is becoming more common in UK and Scottish Government Departments and there is clearly scope to introduce something along similar lines in the field of childhood obesity.

5.7 In the light of this evidence, it is recommended that an agreed set of outcomes for childhood obesity interventions is developed, focusing on the immediate, intermediate and longer-term outcomes and what level of change can realistically be expected; this would reduce the duplication of effort in measurement and allow meaningful comparison.

5.8 The findings of this rather narrowly focused piece of research should also be considered in the wider context of how PSBs are required to use evidence in their Assessments of Local Well-being and in shaping their Local Well-being Plans. This has been a subsidiary, but important theme within this research. As outlined already, the evidence here demonstrates some of the challenges PSBs are likely to face, particularly around the evidence-based design of initiatives, articulating how interventions are intended to work and assessing their effectiveness in a proportionate but meaningful way. It is fair to say that the evidence gathered in relation to childhood obesity reads across to other complicated social, economic, cultural and environmental issues and the basic questions PSB would ask of them are likely to be similar.

5.9 In a sense, the issue of childhood obesity is a high benchmark against which to compare. As outlined previously, it is a well-evidenced field, underpinned by a wealth of empirical research, systematic reviews and robust national data collection. Moreover, it is an issue which naturally brings together practitioners from public health and various fields of local government, education and health. As such, interventions in childhood obesity tend to be evidence-based and lean heavily towards evaluation. This will not be true of all the issues PSBs will consider in their Assessments and Plans and some will be comparatively under-developed and, as a result, more challenging.

5.10 As such, it is recommended that PSBs (taken to also mean their constituent organisations which contribute to Assessments of Local Well-being and Local Well-being Plans) consider developing or implementing a basic evaluation

framework. Such a framework should have generic applicability rather than focusing on a particular issue or topic, such as childhood obesity. It should also be flexible enough to allow for adaption. Given the range of frameworks and tools already available, developing a new bespoke framework would probably be unnecessary. It is more important to encourage greater consistency and robustness in the way PSBs' approach the assessment of outcomes. Such a framework would ideally incorporate all of the features outlined above, which would entail:

- Some form of light-touch evaluability assessment, for new and existing interventions, to maximise the chances of conducting a meaningful evaluation from the very early stages and to identify the most appropriate form of evaluation;
- Some guidance on how to use existing evidence to design and shape interventions – i.e. how to take the successful elements of existing approaches and incorporate them into practice in another context;
- Guidance on how to set meaningful evaluation questions, e.g. differentiating the key approaches such as process evaluation and outcomes evaluation from questions of impact, which are far more demanding methodologically;
- Recommendations on the type of data and evidence to collect to make a meaningful assessment of effectiveness;
- Guidance on how best to analyse and interpret evidence in an evaluative way.

This study will not go as far as recommending a particular evaluation framework to adopt.

5.11 The literature suggests that childhood obesity is best dealt with by taking a partnership approach as it is an issue that spans services. This research found that although interventions were based on partnerships, the majority were led from a health perspective rather than a fully integrated approach. The research demonstrated that there had been little evaluation to explore the effect, if any, of this choice of arrangement.

5.12 **Therefore, is also recommended that greater emphasis is placed by PSBs on process evaluation (or some kind of implementation review), as a means of understanding effectiveness.** Even where interventions are largely evidence-based or established on best practice, this does not negate robust evaluation,

especially if interventions have been adapted to suit local needs. But in those instances, or where an outcomes evaluation is not feasible, it may be sufficient to focus on how the intervention was implemented, through a process evaluation, and if/how this would affect outcomes. Even if all actions are evidence based a variety of factors such as implementation and participant demographics may undermine the effectiveness of interventions. If the efficacy of the intervention is already established, then an outcome or impact evaluation may not be necessary. Process evaluation is a relatively more straightforward and less costly undertaking than outcome or impact evaluation and the skills set required is less demanding on PSBs.

5.13 **Finally, it is recommended that the main findings of this research be disseminated in a targeted way and discussed with the audiences who could benefit from it the most.** Firstly it is important that the findings are shared with the community of practitioners working on childhood obesity in Wales, as an opportunity to reflect on opportunities and challenges around evaluation and understanding outcomes. This may prompt further consideration of an evaluation framework, or at least an agreed outcomes set. Secondly, the results should be shared with the community of practitioners leading on the development of Assessments of Local Well-being and Local Well-being Plans on behalf of the PSBs in Wales. At the time of writing, PSBs are at the point of turning their attentions to the 'Response Analysis' element of their work, which will demand a more evaluative, critical use of evidence to shape future service delivery in local areas. This study, however modest, can add to the ongoing discussion around building analytical capacity, particularly around evaluation, and could act as a catalyst for some positive action in this area.

References

Blamey, A. and Mackenzie, M., 2007. Theories of change and realistic evaluation peas in a pod or apples and oranges?. *Evaluation*, *13*(4), pp.439-455.

Foresight (2007), *Tackling Obesities: Future Choices – Project Report.* Second edition. London: Government Office for Science

Glasgow, R.E., Vogt, T.M. and Boles, S.M., 1999. Evaluating the public health impact of health promotion interventions: the RE-AIM framework. *American Journal of Public Health*, 89(9), pp.1322-1327.

House of Common Health Committee (2009). *Health Inequalities. Third Report of Session 2008-9.* London: The Stationery Office

James, J., Thomas, P., Cavan, D. and Kerr, D., 2004. Preventing childhood obesity by reducing consumption of carbonated drinks: cluster randomised controlled trial. *British Medical Journal*, *328*(7450), p.1237.

Jilcott, S., Ammerman, A., Sommers, J. and Glasgow, R.E., 2007. Applying the RE-AIM framework to assess the public health impact of policy change. *Annals of Behavioral Medicine*, *34*(2), pp.105-114.

Mokdad, A.H., Ford, E.S., Bowman, B.A., Dietz, W.H., Vinicor, F., Bales, V.S. and Marks, J.S., 2003. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *Journal of the American Medical Association*, *289*(1), pp.76-79.

O'Dwyer, M.V., Fairclough, S.J., Knowles, Z. and Stratton, G., 2012. Effect of a family focused active play intervention on sedentary time and physical activity in preschool children. *International Journal of Behavioral Nutrition and Physical Activity*, *9*(1).

Prospective Studies Collaboration, 2009. Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies. *The Lancet*, 373(9669), pp.1083-1096.

Public Health Wales (2016) Child Measurement Programme for Wales 2014/2015 [online] Available at: http://www.wales.nhs.uk/sitesplus/888/page/67795 [Accessed 15 Sep. 2016].

Pulgaron, E.R., 2013. Childhood obesity: a review of increased risk for physical and psychological comorbidities. *Clinical therapeutics*, *35*(1), pp.A18-A32.

Reilly, J.J. and Kelly, J., 2011. Long-term impact of overweight and obesity in childhood and adolescence on morbidity and premature mortality in adulthood: systematic review. *International Journal of Obesity*, *35*(7), pp.891-898.

Roberts, K., Cavill, N. and Rutter, H., 2009. Standard evaluation framework for weight management interventions. *National Obesity Observatory*.

Robertson, W., Thorogood, M., Inglis, N., Grainger, C. and Stewart-Brown, S., 2012. Two-year follow-up of the 'Families for Health' programme for the treatment of childhood obesity. *Child: Care, Health and Development*, *38*(2), pp.229-236.

Serdula, M.K., Ivery, D., Coates, R.J., Freedman, D.S., Williamson, D.F. and Byers, T., 1993. Do obese children become obese adults? A review of the literature. *Preventive Medicine*, *22*(2), pp.167-177.

Stevens, G.A., Singh, G.M., Lu, Y., Danaei, G., Lin, J.K., Finucane, M.M., Bahalim, A.N., McIntire, R.K., Gutierrez, H.R., Cowan, M. and Paciorek, C.J., 2012. National, regional, and global trends in adult overweight and obesity prevalences. *Population Health Metrics*, *10*(22).

Waters, E., de Silva Sanigorski, A., Hall, B.J., Brown, T., Campbell, K.J., Gao, Y., Armstrong, R., Prosser, L. and Summerbell, C.D., 2011. Interventions for preventing obesity in children (review). Cochrane Collaboration, (12), pp.1-212.

Waters, E., Hall, B.J., Armstrong, R., Doyle, J., Pettman, T.L. and de Silva-Sanigorski, A., 2011. Essential components of public health evidence reviews: capturing intervention complexity, implementation, economics and equity. *Journal of Public Health*, 33(3), pp.462-465.

Welsh Government (2016a). European Social Fund Local Service Board development and priority delivery project. [online] Available at: http://gov.wales/statistics-and-research/european-social-fund-local-service-board-development-priority-delivery-project/?lang=en [Accessed 15 Sep. 2016].

Welsh Government (2016b). Public services boards: guidance on the use of evidence and analysis. [online] Available at: http://gov.wales/docs/dpsp/publications/160225-spsf-5-non-stat-guidance-part-4-wfh-act-en.pdf [Accessed 15 Sep. 2016].

Welsh Government (2014). Turning the Curve on Childhood Obesity in Wales [online] Available at: http://gov.wales/topics/improvingservices/public-services-leadership-panel/nwp/effectservices/preventative-action-childhood-obesity/?lang=en [Accessed 15 Sep. 2016].

Welsh Government (2015) Welsh Index of Multiple Deprivation 2014 [online] Available at: http://gov.wales/statistics-and-research/welsh-index-multiple-deprivation/?lang=en [Accessed 15 Sep. 2016].

White, M., Adamson, A., Chadwick, T., Dezateux, C., Griffiths, L., Howel, D., Kelly, S., Law, C., Li, L., Lo Conte, R. and Power, C., 2007. The changing social patterning of obesity: an analysis to inform practice and policy development. *Public Health Research Consortium. Report*, (4).

Annex A

Topic guide used in interviews with LSB representatives

Opening Questions

Tell me about your role within the LSB

What was you involvement in the LSB response to the ESVG report?

How is the issue of obesity viewed?

Is a there a defined obesity strategy agreed amongst all partners?

To what extent were all LSB partners involved in determining obesity strategy?

- Which partners are most heavily involved in the obesity strategy

Is there a particular partner that takes the lead on the obesity agenda?

What issues are considered alongside obesity?

- How does the issue of obesity fit with other issues identified in the SIP

Are there any dedicated policy or strategy groups within the LSB related to obesity?

- Is there a specific focus on children?

Have there been any lessons learnt from other areas of child wellbeing *(e.g. social care)* that have been applied to obesity strategy?

Why were these interventions selected and how were they developed?

Is there a reference to the SIP or needs assessment when selecting actions?

- How is the SIP used in action, can you tell me about this process?
- Take me through the process of choosing a programme to implement

- What are the main priorities which are considered when selecting a course of action?
- Do you tend to achieve these aims?
- Are there other factors that usually end up having the most influence?

Do partners work together to determine intervention efforts?

Do partners with the most experience take the lead in each area?

- Is there consideration of what else is being done to avoid overlap and maximise efficiency?

When developing and selecting actions do you incorporate evidence of what has been effective elsewhere?

- *Any examples*
- How do you get this kind of information?
- What form does this information usually take?

Alternatively, do you incorporate any recommendations of best practice?

Are programmes trialled?

- Why is this
- Ever found that something that worked elsewhere didn't work or was impractical here?
- Have you ever had to adapt programmes?
- Is this something that is routinely considered

What is the working relationship with third sector organisations?

- Do third sector organisations conduct their own monitoring or evaluation?
- Do they share the results with you?
- Do you ever collaborate on monitoring or evaluation?

Does the LSB/council develop its own interventions?

- Is there a dedicated team for this?
- What information is used in development?

How is the need for evaluation understood and what monitoring is in place?

Can you tell me about the general approach to evaluation in the area?

Are any resources (e.g. toolkits, frameworks) used to guide monitoring efforts?

- Why was [this framework] selected?
- What are the benefits of using it?
- What are your opinions about that method?

How is information managed within the LSB?

- *Thinking about this type of information...*
- Is there a dedicated individual who manages information like this?
- When preparing information for tasks such as these how do the different partners co-ordinate their input

Do you keep track of the process of carrying out these schemes and interventions?

Does this take the form of a formal process analysis?

- Who collects this information?
- How is it used?
- Is the information collected linked with how the intervention is expected to work?
- How common is this?

Do you use data from national surveys?

- Do you rely on this data heavily for evaluation and monitoring?

I have seen some examples of particular interventions being thoroughly evaluated (e.g. Pembrokeshire Family Challenge), are there any examples of this in your area?

- Who co-ordinated this?
- Why was this particular initiative selected (*for in depth evaluation)*?
- If so, have any of these methods remained in place?
- Any transferrable skills learnt?
- Any attempt to apply the same tactics to a different project?
- How was the information that was gathered put to use?

Do you monitor the uptake and reach of activities?

- Why?
- How do you use this information?
- Who collects this information?

If so, is any consideration given to the characteristics of the participants?

- What kind of information is collected?
- How is this information used?
- Is this considered a priority in evaluation?

- Is there a specific consideration of disadvantage when developing and delivering interventions?
- Do you have any methods of keeping track of whether these efforts really reach those who need them?

Do you compare progress to targets?

- Where do these targets come from?
- What kind of information does this give you?
- Is there anything that it doesn't tell you that would be useful?

What resources do you have for evaluation?

- What support do you need to improve evaluation?

Many responses mentioned financial and budgetary restraints, does this have any impact on your ability to evaluate?

What, if any, interventions are deemed effective and what is that based on?

Are there any interventions deemed by the LSB to be particularly effective?

- Why this one?
- What kind of evaluation has been carried out?
- Is there any ongoing monitoring?
- Have any lessons learnt from this project been applied to others?

I'm interested in how you judge the success of such interventions, can you tell me about that?

- What are the primary outcomes that this judgement is based on?
- And how do you choose these outcomes?
- What type of information is favoured by the LSB?

In judging success what sort of benchmarks have you compared progress to?

- Do you ever collect baseline information?

Are there any interventions from elsewhere or nationwide that the LSB deems as most effective or best practice?

- Are there any plans to adopt that intervention here?
- If not, what are the barriers?
- If yes, what would facilitate adoption?

Do you share your successes or failures with other LSBs?

- Do other LSBs communicate their successes or failures with you?

Are any external partners involved in the evaluation of these interventions?

- What form does this take?
- Is any independent advice sought in other ways?

Are there any other issues that we haven't covered that you or the wider LSB think are important?

Topic guide used in interviews with stakeholders

Can you tell me a bit about the background to your role?

Do you have any experience working at the local government level or with local partners?

What are the expectations for how impact is understood?

How do you think that the need for evaluation is perceived at the local level?

Broadly speaking, what do you expect in terms of evaluation at the local level?

In your experience what is the attitude towards evaluation at the local level?

What they think should be happening

What forms of evaluation would you hope to see being conducted to assess the impact of public health interventions in the field of childhood obesity?

To what extent to you think that this is achievable at the local level?

What role do you see local service boards/authorities as playing in evaluation?

In your experience are there particular challenges faced at the local level?

Or any examples where you have encountered good practice?

Are there any ways in which your department contributes to or support local level evaluation efforts?

Can you tell me your thoughts about some of the current, widely used, evaluation methods?

What are the problems with current evaluation methods/approaches?

How the current approaches are compatible with legislation (e.g. WBFG Act)

Given the new requirements placed on local services by the WBFG act **do you think that current efforts in evaluation are suitable?**

How do issues such as sustainable development and wellbeing duties affect evaluation?

Where should we progress to in the future?

Given the caveats that have been discussed and the requirements of new legislation…

Ultimately, in an ideal world, what would you expect from evaluation?

- What kind of methods
- What kind of data collected

What kind of conclusions could be drawn that aren't at the moment?

Would you expect any change in attitudes to evaluation in the future?

- *If yes* what do you expect to be driving these changes?

Are there any smaller steps that you think can be achieved in the near future?